REMARKS

Claims 1-3, 6-19, 22-35, and 37-40 are pending in the present application. Claims 1, 17, and 33 are amended to correct a typographical error. Reconsideration of the claims is respectfully requested.

I.   Objection to Abstract

The Examiner states that Applicants' amendment fails to respond to the Examiner's objection to the Abstract. The Examiner also states that the objection is maintained. However, the Examiner has never made an objection. The Final Office Action, as well as the previous Office Action, does include a form paragraph that reminds Applicants of the proper language and format of an abstract of the disclosure. However, the Abstract in the instant application appears to comply with the proper language and format. Furthermore, the Office Action does not include any statement that the Abstract is objected to or any explanation as to why the Abstract would be objected to.

II.   35 U.S.C. § 103, Obviousness

The Office Action rejects claims 1, 7-8, 17, 23-24, 33, and 37 under 35 U.S.C. § 103 as being unpatentable over *Hitchcock et al.* (U.S. Patent No. 6,345,278). This rejection is respectfully traversed.

Hitchcock teaches a universal forms engine that allows data sharing between customizable on-line forms. Customized forms may be provided for a plurality of on-line applications. As the user enters user information and application information into general forms and customized forms, this data is abstracted from the coding. That is, the information is stored in a database. See *Hitchcock*, col. 2, lines 35-49. The user information and application information may then be automatically entered from the database into succeeding forms. See *Hitchcock*, col. 5, line 27, to col. 6, line 2.

In contradistinction, the present invention provides a method, system, and computer program product for customizing a web-based graphical user interface for an application on a data processing system, wherein the application generates a plurality of screens of display and wherein the plurality of screens of display of the application are not web-based. Many entities wish to have a presence on the World Wide Web.

However, some entities use legacy applications that are not web-based. That is, the screens of display for the applications are not in a format for presentation on the web. These screens of display may be customized to form a web-based graphical user interface. However, the process of customizing a legacy application into a web-based graphical user interface is cumbersome and often time consuming.

Thus, the invention, as recited in claim 1, for example, initiates customization of the web-based graphical user interface using a first customization format based on the plurality of screens of display and, responsive to a given event, automatically switching from the first customization format to a second customization format. *Hitchcock* does not teach customization of a web-based graphical user interface using a first customization format based on the plurality of screens of display, because Hitchcock does not teach any customization. Rather, *Hitchcock* teaches providing a plurality of customized forms for a plurality of institutions. See *Hitchcock*, col. 5, lines 35-39. Although *Hitchcock* first teaches that customized forms are provided, *Hitchcock* also teaches that forms engine 104 dynamically generates a customized application form based upon an application description in application data file 108 using a CGI program. See *Hitchcock*, col. 5, line 48, to col. 6, line 2. Whether the customized forms are simply provided to the third party service or dynamically generated by a forms engine based on an application description, *Hitchcock* does not teach or suggest customizing a web-based graphical user interface using a first customization format based on the plurality of screens of display, particularly wherein the plurality of screens of display of the application are not web-based, as recited in claim 1.

The Final Office Action states:

It was well known in the state of the art that plurality of screens of displays of an application were not required to be web-based. **The Examiner takes OFFICIAL NOTICE.** It would have been obvious to one of ordinary skill in the art, having the teachings of Hitchcock et al. that the plurality of screens of displays by Hitchcock et al. were not required to be web based applications in order for presenting users multiple selections of applications.

Office Action dated December 3, 2004. Applicants respectfully disagree. Applicants traverse the Official Notice taken by the Examiner. The majority of the *Hitchcock* reference is concerned with on-line, web-based, hypertext markup language (HTML),

and common gateway interface (CGI) forms. See, for example, Abstract; col. 3, line 55, to col. 4, line 41; col. 5, line 27, to col. 6, line 23; col. 10, lines 41-63. However, the *Hitchcock* reference certainly does not teach or suggest customizing a web-based graphical user interface using a first customization format based on a plurality of non-web-based screens of display. The Examiner appears to attempt to address features that are clearly missing from the reference by taking Official Notice even though the teaching that allegedly would be obvious is contrary to the actual teachings of the reference. Absent some actual teaching, suggestion, or incentive to modify *Hitchcock* in this manner, the presently claimed invention can be reached only through an improper use of hindsight using the Applicants' disclosure as a template to make the necessary changes to reach the claimed invention.

Furthermore, the Final Office Action alleges that *Hitchcock* teaches a third party service that provides customized forms for each participating institution and that data is shared between the customized applications at col. 5, lines 33-48. The cited portion of *Hitchcock* is as follows:

> FIGS. 9a-9c show the first page of an electronic, on-line admissions application 96 that is customized in content and appearance for a particular institution. As shown in FIG. 9a, each application is individually "branded," that is, it carries the name and logotype 42 of the institution and appears in a style that is representative of the institution. Thus, it is transparent to the applicant that a third party is servicing the application, that is, the applicant may not even be aware that the application is processed by a third party servicer. In accordance with the invention, the third party servicer provides customized forms for each participating institution, and data is shared between the customized applications. Information that had previously been entered in connection with prior applications to any institution is automatically inserted into the customized form. Information entered by the applicant onto the application form is stored in an applicant database for automatic insertion into subsequent applications by that applicant. The HTML source code for page 1 is attached in Appendix 1. FIGS. 10a-10c, FIGS. 11a-11b, and FIGS. 12a-12d show additional pages of application 96.

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Hitchcock, col. 5, lines 27-47. Thus, *Hitchcock* teaches a third party service that a third party service provides access to customized forms and stores data that may be used to fill in fields in subsequent forms. However, the Final Office Action does not proffer any explanation as to why a third party service simply providing customized forms or dynamically generating customized forms by a forms engine based on an application description is somehow equivalent to initiating customization of the web-based graphical user interface using a first customization format based on the plurality of screens of display and, responsive to a given event during customization, automatically switching from the first customization format to a second customization format, wherein the first customization format and the second customization format maintain continuous interaction with the application, as recited in claim 1, for example.

Furthermore, *Hitchcock* does not teach or suggest automatically switching from the first customization format to a second customization format responsive to a given event. The Office Action alleges that *Hitchcock* teaches this feature at col. 8, lines 65-67; col. 9, lines 50-58. While the cited portions do mention an HTML format for **display** and also discloses switching from one page to another, *Hitchcock* does not teach or suggest a first format or a second format that is used for **customizing** a web-based graphical user interface based on a plurality of screens of display generated by an application that is not web-based.

The Final Office Action further directs Applicants' attention to col. 9, lines 48-65 of *Hitchcock* as allegedly teaching automatically switching from a first customization format to a second customization format responsive to a given event. The cited portion of *Hitchcock* states:

> The values assigned to attributes for individual applicants are stored in a User Attributes Table. Each row of the table includes a User Identification, an Attribute Identification Number, a sequence for the Attribute Identification Number, and a data value. When an applicant enters information on an application page on the Web and posts the form to the server, the information entered by the applicant is stored in the User Attribute Table after first stage validation. The form is posted when the applicant switches to another page or when the applicant indicates that the information is to be saved. An applicant may change the values of an attribute from one application to

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> another. For example, an applicant may change his or her
> SAT scores to reflect new test results.
>
> The User Attribute Table always includes the latest
> information that an applicant had entered and is used to
> supply information for new applications. When the user
> calls up an application to complete, data is read from the
> User Attribute Table. When a new application includes
> attributes that were not requested by any application that
> the user previously completed, a new row corresponding to
> the new attribute is inserted into the User Attribute Table.
> Preferably a single User Attribute Table includes the
> attribute information on all applicants in the systems.

Hitchcock, col. 9, lines 44-66. *Hitchcock* certainly teaches storing information entered into web-based forms into a user attribute table. However, the Final Office Action fails to explain how this is equivalent to automatically switching from a first customization format to a second customization format responsive to a given event. Indeed, the cited portion does include a form of the word "switching"; however, the cited portion teaches switching a page, not automatically switching from a first customization format to a second customization format, as recited in claim 1, for example.

Still further, *Hitchcock* does not teach or suggest switching from a first customization format to a second customization format wherein the first customization format and the second customization format maintain continuous interaction wit the application. That is, *Hitchcock* fails to teach or suggest initiating customization of a web-based graphical user interface using a first customization format and, during customization, switching to a second customization format while still maintaining continuous interaction with the application. The Office Action alleges that *Hitchcock* teaches this feature and cites a seemingly arbitrary, albeit lengthy, portion of the reference. The cited portion teaches data validation and on-line payment methods. However, the Office Action proffers no analysis as to why data validation and on-line payment methods are somehow equivalent to initiating customization of a web-based graphical user interface using a first customization format and switching to a second customization format while still maintaining continuous interaction with the application.

For the above reasons, *Hitchcock* does not teach or suggest each and every limitation of claim 1; therefore, *Hitchcock* does not anticipate claim 1. Claims 17 and 33

recite subject matter addressed above with respect to claim 1 and are allowable for the same reasons. Since claims 7, 8, 23, 24, and 37 depend from claims 1, 17, and 33, the same distinctions between *Hitchcock* and the invention recited in claims 1, 17, and 33 apply for these claims. Additionally, claims 7, 8, 23, 24, and 37 recite other additional combinations of features not suggested by the reference.

Therefore, Applicants respectfully request withdrawal of the rejection of claims 1, 7-8, 17, 23-24, 33, and 37 under 35 U.S.C. § 103.

The Office Action rejects claims 2, 3, 6-7, 9-16, 18-19, 22, 25-32, 34-35, and 38-40 under 35 U.S.C. § 103 as being unpatentable over *Hitchcock et al.* (U.S. Patent No. 6,345,278) in view of Applicant's Admitted Prior Art ("AAPA"). This rejection is respectfully traversed.

With respect to claims 9, 25, and 38, the Office Action alleges that *Hitchcock* teaches executing a retrieved customization format to customize the graphical user interface responsive to the retrieved customization format recognizing the host application screen at col. 8, lines 30-52. Applicants respectfully disagree. The cited portion of *Hitchcock* states:

> Thus, the applicant information is entered in a customizable form on a browser running on any type of computer platform and stored at third party servicer 24 in a database. The information in the database is then reloadable into another customizable application form for a different institution. The information is also transmittable to an institution in its preferred format regardless of the platform used by the institution to process the information.
>   After an application is sent to an institution, the information remains available in the database of the third party servicer for further analysis by the institution. The institution can, for example, sort or view applicants based upon attributes such as test scores, grade point average, participation in sports, or musical talent. Moreover, each applicant attribute has a property that can be used to specify who in the institution has access to the attribute for the purpose of uploading the information or of processing the information to characterize the applicant pool. For example, parts of an application dealing with academic background may be viewable by academic departments,

whereas more personal information may be viewable only
by school administrators.

Hitchcock, col. 8, lines 30-50. The cited portion does not teach or suggest executing a retrieved customization format to customize the graphical user interface responsive to the retrieved customization format recognizing the host application screen. To the contrary, the cited portion of *Hitchcock* teaches executing a customizable form and retrieving data from a database to populate fields of the form. There is no mention of determining if the retrieved customization format recognizes a host application screen among the plurality of host application screens, as recited in claim 9.

While a macro-based customization format is generally known as a single customization format, the prior art, when considered as a whole, fails to teach or suggest initiating customization of the web-based graphical user interface using a first customization format based on the plurality of screens of display and, responsive to a given event during customization, automatically switching from the first customization format to a second customization format. Thus, Applicants' allegedly admitted prior art does not solve the deficiencies of the prior art.

More specifically, as described above, *Hitchcock* does not teach customizing a web-based graphical user interfaces based on a plurality of pages of display that are not web-based. Therefore, even assuming, *arguendo*, that a person of ordinary skill in the art would have been motivated to combine the teachings of *Hitchcock* with Applicants' allegedly admitted prior art, the proposed combination would not result in the invention recited in claim 9. Instead, a combination of *Hitchcock* and Applicants' allegedly admitted prior art would result in a third party service that provides customized forms for a plurality of institutions where every one of the customized forms is customized using a macro-based customization format.

With respect to claims 14, 30, and 40, the Office Action alleges that *Hitchcock* teaches matching the retrieved customization format to customization format entry points and, responsive to the retrieved customization format matching a customization entry point at col. 10, lines 41-64, reentering the retrieved customization format at col. 19, lines 12-22. The cited portions of *Hitchcock* state:

> The Application Data File is a specially formatted text file that acts as an application description. It is a series of "directives" and optional arguments which the forms engine parses to build the HTML form and to merge in user data. The directives are interpreted by means of a look-up in a data structure that stores the directive interpretations. For example, a line in the Application Data File may be "SS_NUM." Upon encountering the line, the forms engine will look into a data structure to interpret SS_NUM. SS_NUM may mean, for example, to display a text box with a label that reads "Enter Your Social Security Number" and to put the previously supplied value for social security number (stored in the User Attribute Table) into the text box. SS_NUM may also prescribe a minimum length, maximum length, and call a function that creates the text input box. The directive could also set flags that indicate a particular state for the application. The Application Data File can optionally supply arguments to directives. Arguments may, for example, instruct the forms engine to apply specific labels or to override default values, so that the label or format for entering the data can be customized. The information in the Application Data File could alternatively be included in the Applications Table.

Hitchcock, col. 10, lines 41-63.

> With regard to the front-end state model, the following is a list of the states the engine defined by the action that caused the engine to be in that state:
> 1. "Initial Contact"--The user is requesting the application form from outside of the engine. The engine will create the first page of the application, merge any matching user data, and return the form.
> 2. "Page Flip"--For multi-page applications, the user has come from page "x" and wants to go to page "y". The engine first applies front-end validation to the incoming data posted from page "x" (which may result in returning a data correction page), saves the validated data, generates page "x", merges any matching user data and returns the form.

Hitchcock, col. 14, lines 10-22. These cited portions describe the application data file that is used to dynamically generate a web-based form and states of the form engine. The Office Action does not proffer any analysis as to why this somehow teaches or even suggests establishing a plurality of customization format entry points, matching a current

screen within the host application to a first customization format entry point from the plurality of customization entry points, and responsive to matching a current screen within the host application to a first customization format entry point from the plurality of customization entry points, executing the first customization format based on the matching, as recited in claim 14.

The Final Office Action states:

> With respect to claim 14, 30 and 40, Applicant also argues Hitchcock et al. does not teach establishing a plurality of customization format entry points. However, Applicant's attention is directed to column 3, line 55 through column 4, line 12 "...that is executing a forms engine of the present invention, as well as Web server software that coordinates communications...." And column 19, lines 12-28 "the user is requesting the application form from outside of the engine. The engine will create the first page of the application, merge any matching user data.."

Office Action dated December 3, 2004. It is unclear what coordinating communications or creating a first page of an application and merging matching user data has to do with establishing a plurality of customization format entry points, matching a current screen within the host application to a first customization format entry point from the plurality of customization entry points, and responsive to matching a current screen within the host application to a first customization format entry point from the plurality of customization entry points, executing the first customization format based on the matching, as recited in claim 14, for example. The Office Action appears to cite seemingly arbitrary portions of the reference with no explanation as to how the claim limitations are allegedly obvious.

The prior art, when taken as a whole, fails to teach or suggest each and every feature of claim 14; therefore, the proposed combination of *Hitchcock* and Applicants' allegedly admitted prior art, taken alone or in combination, fail to render claim 14 obvious. Independent claims 30 and 40 recite subject matter addressed above with respect to claim 14 and are allowable for the same reasons.

Claims 2, 3, 6, 7, 10-13, 15, 16, 18, 19, 22, 26-29, 31, 32, 34, 35, and 39 depend from claims 1, 9, 14, 17, 25, 30, 33, 38, and 40 and, thus, are allowable at least by virtue of their dependency. In addition, claims 2, 3, 6, 7, 10-13, 15, 16, 18, 19, 22, 26-29, 31, 32, 34, 35, and 39 recite other combinations of features not taught or suggested by the prior art.

Therefore, Applicants respectfully request withdrawal of the rejection of claims 2, 3, 6, 7, 9-16, 18, 19, 22, 25-32, 34, 35, and 38-40 under 35 U.S.C. § 103.

III.   Conclusion

It is respectfully urged that the subject application is patentable over the prior art of record and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,

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